NEW MEXICO
ENVIRONMENT DEPARTMENT

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SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lt. Governor

BUTCH TONGATE
Cabinet Secretary

J. C. BORREGO
Deputy Secretary

Certified Mail - Return Receipt Requested

August 1, 2017

The Honorable Bob Wilson, Mayor
Village of Jemez Springs
Post Office Box 269
Jemez Springs, New Mexico 87025

Re: Village of Jemez Springs Wastewater Treatment Plant; Minor Municipal; SIC 4952; NPDES Compliance Evaluation Inspection; NM0028011; May 23, 2017

Dear Mayor Wilson:

Enclosed please find a copy of the report and check list for the referenced inspection that the New Mexico Environment Department (NMED) conducted at your facility on behalf of the U.S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas for their review. These inspections are used by USEPA to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the federal Clean Water Act.

Introduction, treatment scheme, and problems noted during this inspection are discussed in the "Further Explanations" section of the inspection report.

You are encouraged to review the inspection report, required to correct any problems noted during the inspection, and advised to modify your operational and/or administrative procedures, as appropriate. If you have comments on or concerns with the basis for the findings in the NMED inspection report, please contact us (see the address below) in writing within 30 days from the date of this letter. Further, you are encouraged to notify in writing both the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

David Long
US Environmental Protection Agency, Region VI
Enforcement Branch (6EN-WM)
1445 Ross Avenue
Dallas, Texas 75202-2733

Sarah Holcomb
New Mexico Environment Department
Surface Water Quality Bureau
Point Source Regulation Section
P.O. Box 5469
Santa Fe, New Mexico 87502

If you have any questions about this inspection report, please contact Barbara Cooney at (505) 827-0212 or at barbara.cooney@state.nm.us.

Sincerely,

/S/ Sarah Holcomb

Sarah Holcomb
Program Manager
Point Source Regulation Section
Surface Water Quality Bureau

cc: David Long, USEPA (6EN-WM) by e-mail
Carol Peters-Wagnon, USEPA (6EN-WM) by e-mail
Gladys Gooden-Jackson, USEPA (6EN-WC) by e-mail
Brent Larsen, USEPA (6WQ-PP) by e-mail
NMED District II, Robert Italiano, Manager, by e-mail

Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

NPDES Compliance Inspection Report

Section A: National Data System Coding

Transaction Code	NPDES	yr/mo/day	Inspec. Type	Inspector	Fac Type
1 N 2 5 3	N M 0 0 2 8 0 1 1 11	12 1 7 0 5 2 3 17	18 C	19 S 20	

Remarks

M I N O R M U N I C I P A L

Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved
67 69	70 2	71 N 72	N 73 74	75 M I N O R 80

Section B: Facility Data

Name and Location of Facility Inspected *(For industrial users discharging to POTW, also include POTW name and NPDES permit number)*
Village of Jemez Springs WWTP – From Santa Fe, Take I-25 South to Exit 242. Turn onto NM550 through Bernalillo, Proceed to NM4 at San Ysidro, turn right, travel through the Jemez Pueblo and aprox. 9.4 miles from the Pueblo to the WWTP. Facility is on the left side. The Village office is another aprox. 3.4 miles up to road, next to the library in town.
SANDOVAL COUNTY

Entry Time /Date
11:35 Hours / May 23, 2017

Permit Effective Date
March 1, 2016

Exit Time/Date
14:00 Hours / May 23, 2017

Permit Expiration Date
February 28, 2021

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)
Karen Nalezny/Lead Operator/575-829-3540/ 575-829-4203
Yvonne Dickey/Village Clerk 575-829-3540

Other Facility Data
Lat N 35.73371
Long W -106.713083

SIC 4952

Name, Address of Responsible Official/Title/Phone and Fax Number

The Honorable Bob Wilson/Mayor Village of Jemez Springs/Post Office Box 269
Jemez Springs, New Mexico 87025/
575-829-3540

Contacted
Yes [X] No [ ]

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

S	Permit	S	Flow Measurement	M	Operations & Maintenance	N	CSO/SSO
U	Records/Reports	M	Self-Monitoring Program	U	Sludge Handling/Disposal	N	Pollution Prevention
S	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
U	Effluent/Receiving Waters	S	Laboratory	N	Storm Water	N	Other:

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

SEE ATTACHED CHECKLIST FOR FURTHER EXPLANATIONS.

Sludge Records - new hauler and missing information about final disposal

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone/Fax	Date
/S/ Barbara Cooney	NMED/SWQB 505-827-0212 / 505-827-0161	*8-1-2017*
Signature of Management QA Reviewer	**Agency/Office/Phone and Fax Numbers**	**Date**
/S/ Sarah Holcomb	505-827-0187 / 505-827-0161	*8-1-2017*

Village of Jemez Springs WWTP	PERMIT NO. NM0028011

SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS ☒ S ☐ M ☐ U ☐ NA (*FURTHER EXPLANATION ATTACHED No*)

DETAILS:

1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE	☒ Y ☐ N ☐ NA
2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES	☒ Y ☐ N ☐ NA
3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT	☒ Y ☐ N ☐ NA
4. ALL DISCHARGES ARE PERMITTED	☒ Y ☐ N ☐ NA

SECTION B - RECORDKEEPING AND REPORTING EVALUATION

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT. ☐ S ☐ M ☒ U ☐ NA (*FURTHER EXPLANATION ATTACHED Yes*)
DETAILS:

1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs.	☐ Y ☒ N ☐ NA
2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE.	☒ S ☐ M ☐ U ☐ NA
a) DATES, TIME(S) AND LOCATION(S) OF SAMPLING	☒ Y ☐ N ☐ NA
b) NAME OF INDIVIDUAL PERFORMING SAMPLING	☒ Y ☐ N ☐ NA
c) ANALYTICAL METHODS AND TECHNIQUES.	☒ Y ☐ N ☐ NA
d) RESULTS OF ANALYSES AND CALIBRATIONS.	☒ Y ☐ N ☐ NA
e) DATES AND TIMES OF ANALYSES.	☒ Y ☐ N ☐ NA
f) NAME OF PERSON(S) PERFORMING ANALYSES.	☒ Y ☐ N ☐ NA
3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE.	☒ S ☐ M ☐ U ☐ NA
4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR.	☐ S ☐ M ☒ U ☐ NA
5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA.	☒ Y ☐ N ☐ NA

SECTION C - OPERATIONS AND MAINTENANCE

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED. ☐ S ☒ M ☐ U ☐ NA (*FURTHER EXPLANATION ATTACHED Yes*)
DETAILS: One basin down – decant arm out of order and pipes to air distributer has been cracked and damaged. The new system for Ferric Chloride addition to remove Phosphorous is housed in a building that does not have secondary containment and does not have adequate ventilation. Caustic corrosion was observed throughout the building. The mechanism for pouring the solution from the storage barrels to the distribution reservoir shows signs of considerable spillage and potential risk to the operator.

1. TREATMENT UNITS PROPERLY OPERATED.	☒ S ☐ M ☐ U ☐ NA
2. TREATMENT UNITS PROPERLY MAINTAINED.	☐ S ☒ M ☐ U ☐ NA
3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED.	☒ S ☐ M ☐ U ☐ NA
4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE.	☒ S ☐ M ☐ U ☐ NA
5. ALL NEEDED TREATMENT UNITS IN SERVICE.	☐ S ☒ M ☐ U ☐ NA
6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED.	☐ S ☐ M ☒ U ☐ NA
7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED.	☒ S ☐ M ☐ U ☐ NA
8. OPERATION AND MAINTENANCE MANUAL AVAILABLE.	☒ Y ☐ N ☐ NA
STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED.	☐ Y ☒ N ☐ NA
PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED. Not Evaluated	☐ Y ☐ N ☒ NA

SECTION C - OPERATIONS AND MAINTENANCE (CONT'D)

9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR? ☐ Y ☒ N ☐ NA
IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED? ☐ Y ☐ N ☒ NA
HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS? ☐ Y ☐ N ☒ NA

10.HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT? ☐ Y ☒ N ☐ NA
IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT? ☐ Y ☐ N ☒ NA

SECTION D - SELF-MONITORING

PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS. ☒ S ☐ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED Yes)*.
DETAILS:

1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT. ☒ Y ☐ N ☐ NA

2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES. ☒ Y ☐ N ☐ NA

3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT. ☒ Y ☐ N ☐ NA

4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT. ☒ Y ☐ N ☐ NA

5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT. ☒ Y ☐ N ☐ NA

6. SAMPLE COLLECTION PROCEDURES ADEQUATE ☒ Y ☐ N ☐ NA

a) SAMPLES REFRIGERATED DURING COMPOSITING. Batch Release samples are grab not compost ☐ Y ☐ N ☒ NA

b) PROPER PRESERVATION TECHNIQUES USED. ☒ Y ☐ N ☐ NA

c) CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136.3. ☒ Y ☐ N ☐ NA

7. IF MONITORING AND ANALYSES ARE PERFORMED MORE OFTEN THAN REQUIRED BY PERMIT, ARE THE RESULTS REPORTED IN PERMITTEE'S SELF-MONITORING REPORT? ☒ Y ☐ N ☐ NA

SECTION E - FLOW MEASUREMENT

PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS. ☒ S ☐ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED Yes)*
DETAILS: A new 6 inch Parshall Flume and back up ultrasonic flow totalize were installed last year.

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. ☒ Y ☐ N ☐ NA
TYPE OF DEVICE

2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED. ☒ Y ☐ N ☐ NA

3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED. ☒ Y ☐ N ☐ NA

4. CALIBRATION FREQUENCY ADEQUATE. *(DATE OF LAST CALIBRATION* No records after flow meter was installed) ☐ Y ☒ N ☐ NA
RECORDS MAINTAINED OF CALIBRATION PROCEDURES. ☐ Y ☒ N ☐ NA
CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE. ☐ Y ☒ N ☐ NA

5. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE. ☒ Y ☐ N ☐ NA

6. HEAD MEASURED AT PROPER LOCATION. ☒ Y ☐ N ☐ NA

7. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES. ☒ Y ☐ N ☐ NA

SECTION F – LABORATORY

PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS. ☒ S ☐ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED No)*
DETAILS:

1. EPA APPROVED ANALYTICAL PROCEDURES USED *(40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES)* ☒ Y ☐ N ☐ NA

Village of Jemez Springs	PERMIT NO. NM0028011

SECTION F - LABORATORY (CONT'D)

2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED ☒ Y ☐ N ☐ NA

3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT. ☒ S ☐ M ☐ U ☐ NA

4. QUALITY CONTROL PROCEDURES ADEQUATE. ☒ S ☐ M ☐ U ☐ NA

5. DUPLICATE SAMPLES ARE ANALYZED. 10__ % OF THE TIME. ☒ Y ☐ N ☐ NA

6. SPIKED SAMPLES ARE ANALYZED. 10__ % OF THE TIME. ☒ Y ☐ N ☐ NA

7. COMMERCIAL LABORATORY USED. ☒☐ Y ☐ N ☐ NA

LAB NAME Hall Environmental

LAB ADDRESS Albuquerque, NM

PARAMETERS PERFORMED BOD, TSS, E.coli, Boron, Total Nitrogen, Total Phosphorous

SECTION G - EFFLUENT/RECEIVING WATERS OBSERVATIONS. ☐ S ☐ M ☒ U ☐ NA *(FURTHER EXPLANATION ATTACHED Yes__).*

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
001	none	none	none	none	none	clear	

RECEIVING WATER OBSERVATIONS Effluent Exceedance: see Further Explanations part of this report for details.

SECTION H - SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. ☐ S ☐ M ☒ U ☐ NA *(FURTHER EXPLANATION ATTACHED Yes__).*
DETAILS:

1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY. ☐ S ☐ M ☒ U ☐ NA

2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503. ☐ S ☐ M ☒ U ☐ NA

3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: Land Application (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE)

SECTION I - SAMPLING INSPECTION PROCEDURES *(FURTHER EXPLANATION ATTACHED No__).*

1. SAMPLES OBTAINED THIS INSPECTION. ☐ Y ☒ N ☐ NA

2. TYPE OF SAMPLE OBTAINED

GRAB _____ COMPOSITE SAMPLE ___ METHOD _____ FREQUENCY

3. SAMPLES PRESERVED. ☐ Y ☐ N ☒ NA

4. FLOW PROPORTIONED SAMPLES OBTAINED. ☐ Y ☐ N ☒ NA

5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE. ☐ Y ☐ N ☒ NA

6. SAMPLE REPRESENTATIVE OF VOLUME AND MATURE OF DISCHARGE. ☐ Y ☐ N ☒ NA

7. SAMPLE SPLIT WITH PERMITTEE. ☐ Y ☐ N ☒ NA

8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED. ☐ Y ☐ N ☒ NA

9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT. ☐ Y ☐ N ☒☐ NA

INTRODUCTION

A Compliance Evaluation Inspection (CEI) was conducted at the Village of Jemez Springs Wastewater Treatment Plant (WWTP) by Ms. Barbara Cooney and Ms. Jennifer Foote of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) on May23, 2017. The inspection was conducted by NMED for the U. S. Environmental Protection Agency (USEPA), Region 6, under the National Pollutant Discharge Elimination System (NPDES) permit program, in accordance with the Federal Clean Water Act. These inspections are conducted under agreement with USEPA and are used by the USEPA to determine compliance with the NPDES permit program.

This facility is a minor domestic waste water treatment plant (WWTP) under the Federal Clean Water Act (CWA), section 402 Nation National Pollutant Discharge Elimination system (NPDES) permit program, and is assigned NPDES permit number NM0028011. The Standard Industrial Classification Code (SIC) is 4941. The facility discharges into the Jemez River in water quality segment 20.6.4.107, thence to Water Quality Segment 20.5.4.106 of the Rio Grande Basin *(State of New Mexico Standards for Interstate and Intrastate Surface Waters).*

Designated uses of Water Quality Segment 20.6.4.107 are coldwater aquatic life, primary contact, irrigation, livestock watering, and wildlife habitat.

INSPECTION DETAILS

The inspectors arrived at the Jemez Springs Office at 11:30 Hours on May 23, 2017 and met with Mayor Bob Wilson, Ms. Yvonne Dickey, Village Clerk and Ms. Karen Nalezny- Lead Facility Operator. The inspector made introduction, showed their credentials and explained the purpose of the visit. Ms. Nalezny accompanied them to the WWTP for the inspection. An exit interview followed with the above-named people. Inspectors left the Village at 14:30 Hours.

TREATMENT SCHEME

Raw sewage flows by gravity through the several miles long collection system to the wet well and influent lift station at the treatment plant. The influent lift station consists of two submersible pumps that carry wastewater to the following treatment works. A hanging basket on a pully system for solids removal is in the wet well. The treatment system is a Sequencing Batch Reactor (SBR), that came on line January 2004.
The SBR consists of 5 chambers that make up parallel treatment trains and a central aerobic solids digester. The treatment processes can be run in parallel or in series. One of the trains is off line because of low flow. The plant was designed for population growth and to handle up to 0.045 MGD. Presently the daily flow is closer to 0.027 MGD and has been for several years. At the beginning of each train is an equalization - pre-activation basin sized 4'x8'x16'. The influent is treated with a solution of Ferric Chloride for phosphorous removal before entering this basin. A new solids-catch basket was installed under the influent pipes in the basin. Following the pre-activation basin is the aeration basin. The offline aeration basin has a broken decant arm and a broken distribution line that carries air to the diffusers.

Once the raw sewage enters the aeration basin, treatment is achieved by cycles though aerobic, settling, and decant phases. The decanter is mounted on a hydraulic arm that lower the units to just below the surface of the water in the basin after the settling phase. On the decanter is

baffling to act as a sort of stationary skimmer, preventing solids floating on the very surface to be decanted. The bottom of the basin has a series of fine bubble diffusers to distribute air during the aeration phase. Also on the bottom of the chamber is a mixing arm, to keep the solids moving and to prevent them from becoming too thick or septic.

The decanted liquid is sent through the Ultraviolet Light disinfection chamber, then through the newly built 6 inch Parshall Flume with staff gauge and a backup ultrasonic effluent flow totalizing meter, then to the Jemez River.

Solids are sent to the middle chamber of the SBR for digestion and thickening. The Village contracts with Atlas Pumping Company (PO Box 10477 / Albuquerque, NM 87184 /505-898-3986) who use Vactor Trucks to draw off the solid/liquid mixture from the digester, and to haul to Frank's Septic, a Ground Water Discharge Permitted Facility (DP452) disposal location near Belen, New Mexico. Previously the facility contracted with a hauler who took the solid/liquid from the digester to the City of Albuquerque, New Mexico WWTP for processing and final surface disposal. The City of Albuquerque combined the solids with those at that facility and conducted the necessary testing under 40CFR503before final disposal. Since the Village of Jemez Springs has contracted with a new hauler, the solids have not been tested per Part IV of this permit.

A series of sand filters are in place at the WWTP as a back up treatment unit and were not being used at the time of this inspection.

FURTHER EXPLANATIONS

Note: The sections are arranged per the format of the enclosed EPA Inspection Checklist (Form 3560-3), rather than being ranked in order of importance.

Section A – Permit Verification – Overall Rating of "Satisfactory"

Section B – Record Keeping and Reporting – Overall Rating of "Unsatisfactory" This is a repeat finding.

Permit Requirements For Record Keeping and Reporting:
The permit requires in PART I, C. MONITORING AND REPORTING (MINOR DISCHARGERS):

> *1. Monitoring and Reporting*
> *a. The permittee shall effectively monitor the operations and efficiency of all treatment and control facilities and the quantity and quality of the treated discharge.*
> *b. Monitoring information shall be on Discharge Monitoring Reports Form(s) EPA 3320-1 as specified in Part III.D.4. of this permit and shall be submitted quarterly. Each quarterly submittal shall include separate forms for each month of the reporting period.*

The permit requires in Part III.C. Monitoring and Records.

> *1. Inspection And Entry:*
> *The permittee shall allow the Director or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:*

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit:
b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and
d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

3. Retention of Records:
The permittee shall retain records of all monitoring information, including all calibrations and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Director at any time.

4. Records Content:
Records of monitoring information shall include:
a. The date, exact place and time of sampling or measurements:
b. The individual(s) who performed the sampling or measurements;
c. The date(s) and times(s) analyses were performed;
d. The individual(s) who performed the analyse(s);
e. The analytical techniques or methods used; and
f. The results of such analyses.

Findings For Record Keeping and Reporting:

The Inspector requested the following records
1.Laboratory Records, bench sheets and collection records for all sample analysis for February 2017.

2. Daily totalized flow records were recorded. Flow meter installed 2015, no follow up calibration or checks done since installation.

3. Records of Solids Removal from the WWTP (Invoices for the contract hauler). Records for final disposal and any sample records of the hauled waste. Solids were removed on February 3, 2017.

4. There were no records of daily maintenance at the facility.

The laboratory analysis for BOD, TSS, Total Nitrogen, Total Phosphorous and Boron are done by Hall Environmental Laboratories.

Section C - Operation and Maintenance – Overall Rating of "Marginal"

Permit Requirements For Operation and Maintenance:
The permit requires in Part III.B. Proper Operation and Maintenance:

3. Proper Operation and Maintenance
a. The permittee shall at all times properly operation and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by permittee as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with this permit.

b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and testing functions required to insure compliance with the conditions of this permit.

Findings For Operations And Maintenance:
The influent lift station consists of two submersible pumps that lift wastewater to the treatment works.
1. Influent Solids Removal has improved since the last inspection with the new baskets at the pre-activation- equalization basins.

2. Ferric Chloride dosing for Phosphorous Removal – storage and containers. This area does not have secondary containment, corrosion was observed throughout the storage building and staining on the ground was observed outside the building.

3. Broken air distribution pipe in bottom of basin needs to be repaired or replace before use.

4. UV basin cleaning – some submersed solids were noted in this basin.

5. Back up Operators and training. The facility does not have a back-up certified operator. The number of staff at the WWTP may not be sufficient to consistently provide proper operation and maintenance. There is only one certified Operator for the WWTP, and one laborer who is responsible for general maintenance though out the Village. The Village should consider increasing the level of certified Operators to cover times when the only Operator is unavailable due to vacations or sick leave.

6. There are no updated O&M procedures.

7. The mixing arms in the aeration basins were out of operation. A problem noted by the Operator is that rags and other solids were getting into the aeration basins, catching and damaging the mixing arm. This causes considerable maintenance issues because the chamber has to be drained to access the mixers to clear them. To maintain optimal operation of the treatment works, large solids removal should take place at the head works of the WWTP.

The hydraulic decant arm in the first aeration basin was broken and chained up (see attached photo). This basin was not in use at the time of the inspection. However, in the event maintenance needs to be done in the second basin, the facility will have no back up treatment.

Section D – Self Monitoring – Overall Rating of "Satisfactory"

Section E – Flow Measurements – Overall Rating of "Marginal"

Permit Requirements For Flow Measurement:

> *The permit requires in Part III.C.6. Flow Measurements:*
> *Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed calibrated, and maintained to insure that the accuracy of the measurements is consistent with the accepted capabilities of that type of device. Devices selected shall be capable of measuring flow flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.*

Finding For Flow Measurements:

A new effluent flow meter, 6" Parshall Flume with staff gauge and a backup ultrasonic totalizing flow meter were installed in 2015. The meter was calibrated at the time of installation by the contract engineer. No third-party calibration has been done since the installation. It is advisable that calibrations be done on a yearly basis. Additionally, periodic checks by the operators of the staff gauge against the ultrasonic meter be performed. According to the operator, this kind of check was done in September or October 2016 but no records were available to verify the check.

Section F - Laboratory - Overall Rating of "Satisfactory"

Section G - Effluent and Receiving Water - Overall Rating "Unsatisfactory"

1. Inaccurate Reporting for Boron. The units reported to the permittee by the contract laboratory Hall Environmental are in milligrams per liter (mg/L). The permit requirements are in micrograms per liter µg/L The January 2017 bench sheet from Hall lab states the Dissolved Boron = 2.2 mg/ L
The report on the DMR = 2.2 µg/L - this is off by three decimal points. The actual value is: 2200.0 ug/L. Based on this all values reported for Dissolved Boron are likely incorrect.

1.0 mg = 1000 microgram. To convert mg/L to µg/l, move the decimal point to the right 3 places.

Boron	**Micrograms/ Liter**	**Micrograms/ Liter (corrected for unit error 1.0 mg = 1000.0 µg)**
	Reported by permittee	**Corrected by inspector**
Permit Limit	**Daily Max 2150 µg/L**	**Daily Max 2150 µg/L**
Date		
2/28/2017	2.6	**2600 Exceedance**
1/31/2017	2.2	**2200 Exceedance**
12/31/2016	2.2	**2200 Exceedance**
11/30/2016	2.3	**2300 Exceedance**
10/31/2016	2.3	**2300 Exceedance**
9/30/2016	2.1	2100
8/31/2016	2.3	**2300 Exceedance**
7/31/2016	2.1	2100
6/30/2016	2	2000
5/31/2016	2.2	**2200 Exceedance**
4/30/2016	2.1	2100
3/31/2016	1.9	1900

The corrected values show that effluent limits for Total Boron were exceeded 7 times since January 2017.
In addition to Boron, the following effluent exceedances were reported since January 2016

Total Nitrogen

Permit Limit Value	4.75mg/L Daily Max
DMR Reported Values	
3/31/16	**5**
4/30/16	**7.6**
9/30/16	**5.3**

Total Phosphorous

Permit Limit	1.0 mg/L Daily Max
DMR Reported Values	
3/31/16	**3**
7/31/16	**2.6**
8/31/16	**2.3**
12/31/16	**1.8**

Section H - Sludge Disposal - Overall Rating of "Unsatisfactory"

Permit Requirements for Sludge Disposal

The permit requires in Part III.B.3. PROPER OPERATIONS AND MAINTENANCE:

> *a. The permittee shall at all times properly operate and maintain all facilities and systems of the treatment and control (and related appurtenances) which are installed or used by permittee as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance with the conditions of this permit.*

40CRF Part 503 Subpart A. General Provisions states:

> (y) *Store or storage of sewage sludge* is the placement of sewage sludge on land on which the sewage sludge remains for two years or less. This does not include the placement of sewage sludge on land for treatment.

The permit requires in Part IV

MINOR - SEWAGE SLUDGE REQUIREMENTS

INSTRUCTIONS TO PERMITTEES

Select only those Elements and Sections which apply to your sludge reuse or disposal practice. **The sludge conditions do not apply to wastewater treatment lagoons where sludge is not wasted for final reuse/disposal. If the sludge is not removed, the permittee shall indicate on the DMR "No Discharge".**

Although reporting is not required at this time, this permit may be modified or revoked and reissued to require an annual DMR.

ELEMENT 1 - LAND APPLICATION

SECTION I: Page 2 - Requirements Applying to All Sewage Sludge Land Application

ELEMENT 2 - SURFACE DISPOSAL

SECTION I: Page 10 - Requirements Applying to All Sewage Sludge Surface Disposal

ELEMENT 1 - LAND APPLICATION

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE LAND APPLICATION

B. Testing Requirements

1. Sewage Sludge

Sewage sludge shall not be applied to the land if the concentration of the pollutants exceeds the pollutant concentration criteria in Table 1. The frequency of testing for pollutants in Table 1 is found in Element 1, Section I.C.

TABLE 1

Pollutant	Ceiling Concentration (milligrams per kilogram)*
Arsenic	75
Cadmium	85
Chromium	3000
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
PCBs	49
Selenium	100
Zinc	7500

* Dry weight basis

Findings for Sludge Disposal

The permittee has a new contractor for sludge hauling. Solids are wasted periodically to the central unit that serves as a digester. From the digester, a contracted Vactor truck removes the solids and they are disposed of. The facility representatives did not know where the final disposal location is. The contractor:
Atlas Pumping Inc. /P.O. Box 1047 / Albuquerque, NM 87184-0477
was contacted by the inspector via the phone number (505) 898-3936 on an invoice the Village has. According to the hauler, final surface disposal is at Frank's Septic in Belen, NM. No solids testing data has been provided. The Hauler is permitted through the NMED Liquid Waste Bureau and Frank's Septic land application site is permitted through NMED Ground Water Quality Bureau.

The Village of Jemez Springs as the NPDES permittee is responsible for meeting the requirements for 40CFR 503 regulations and maintaining records of testing and final disposal of solid waste. The permittee's representatives stated they did not know the final disposal site and have never tested the solids before being collected by the contract hauler, therefore an Unsatisfactory rating is found for this section.

NMED/SWQB Official Photograph Log Photo # 1		
Photographer: Google Earth	Date: Unknown	Time: Unknown
City/County: Village of Jemez Springs / Sandoval County		State: New Mexico
Location: Village of Jemez Springs WWTP		
Subject: Aerial View of the Village of Jemez WWTP.		

NMED/SWQB Official Photograph Log Photo # 2		
Photographer: B. Cooney	Date: May 23, 2017	Time: 11:58 Hours
City/County: Village of Jemez Springs / Sandoval County		State: New Mexico
Location: Village of Jemez Springs WWTP		
Subject: Headworks lift station with hanging basket to collect solids and 2 Flygt Pumps to lift raw sewage to the treatment works. The solids catch basket is difficult to maneuver and clean for the operators and often becoming ineffective allowing large solids to pass through.		

NMED/SWQB Official Photograph Log Photo # 3		
Photographer: B. Cooney	Date: May 23, 2017	Time: 11:59 Hours
City/County: Village of Jemez Springs / Sandoval County		State: New Mexico
Location: Village of Jemez Springs WWTP		
Subject: At the headworks, solids scraping were observed on the bare ground that is less than 50 feet from the Jemez River.		

NMED/SWQB Official Photograph Log Photo # 4 & 5		
Photographer: B. Cooney	Date: May 23, 2017	Time: 11:58 Hours and 12:06 Hours
City/County: Village of Jemez Springs / Sandoval County		State: New Mexico
Location: Village of Jemez Springs WWTP		
Subject: Alarm system at the headworks lift station flashes a light when a problem is detected. If operators do not see it, residents call in to the Village. A call out relay is also in place. A back up diesel generator powers up if there is an interruption to the electricity at the facility. Frequent power outages occur and the generator is run on a nearly weekly basis, according to a facility operator.		

NMED/SWQB Official Photograph Log Photo # 6		
Photographer: B. Cooney	Date: May 23, 2017	Time: 12:01 Hours
City/County: Village of Jemez Springs / Sandoval County		State: New Mexico
Location: Village of Jemez Springs WWTP		
Subject: Tertiary treatment for Total Phosphorous removal includes dosing of Ferric Chloride. The storage of the liquid material, barrels and the distribution system is housed in a single building. There is no secondary containment and improper ventilation. Overflow and spillage was observed. Corrosion was observed on the walls ceilings and staining on the ground outside the building was observed by inspectors. This creates a risk for the operators and potential carry over to the river.		

NMED/SWQB Official Photograph Log Photo # 7		
Photographer: B. Cooney	Date: May 23, 2017	Time: 11:54 Hours
City/County: Village of Jemez Springs / Sandoval County		State: New Mexico
Location: Village of Jemez Springs WWTP		
Subject: Stains on the ground in the building to the left of the photo where the Ferric Chloride is stored.		

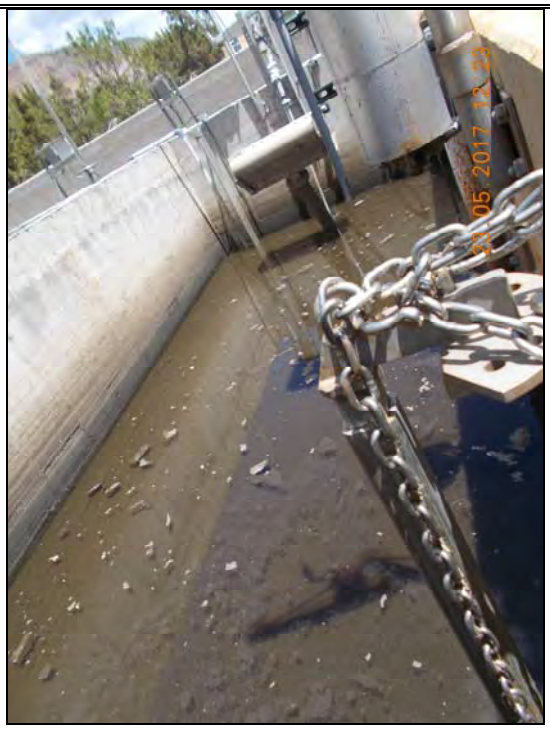
NMED/SWQB Official Photograph Log Photo # 8		
Photographer: B. Cooney	Date: May 23, 2017	Time: 12:33 Hours
City/County: Village of Jemez Springs / Sandoval County		State: New Mexico
Location: Village of Jemez Springs WWTP		
Subject: Four blower for the aeration basins: One was in use at the time for the basin in operation and one was in use for the sludge thickener basin.		

NMED/SWQB Official Photograph Log Photo # 9 & 10		
Photographer: B. Cooney	Date: May 23, 2017	Time: 12:22 Hours and 12: 13 Hours
City/County: Village of Jemez Springs / Sandoval County		State: New Mexico
Location: Village of Jemez Springs WWTP		
Subject: From the headworks raw sewage is sent to the equalization basins, used to control the flow into the aeration basins. New filter baskets were install in the last year to capture large solids that get past the first lift station filter. A flaw in the plant design is that there is no actual bar screen so these catch basket are used. Large solids were observed in the aeration basins. These baskets help remove solids but do not capture all. One treatment train is in use (left photo) and one train is off line (right photo).		

NMED/SWQB Official Photograph Log Photo # 11		
Photographer: B. Cooney	Date: May 23, 2017	Time: 13:36 Hours
City/County: Village of Jemez Springs / Sandoval County		State: New Mexico
Location: Village of Jemez Springs WWTP		
Subject: Aeration phase in basin. Well distributed air throughout the basin.		

NMED/SWQB Official Photograph Log Photo # 12		
Photographer: B. Cooney	Date: May 23, 2017	Time: 13:36 Hours
City/County: Village of Jemez Springs / Sandoval County		State: New Mexico
Location: Village of Jemez Springs WWTP		
Subject: Aeration Basin is slightly grey because solids are being kept longer to deal with thin influent.		

NMED/SWQB Official Photograph Log Photo # 13		
Photographer: B. Cooney	Date: May 23, 2017	Time: 12:23 hours
City/County: Village of Jemez Springs / Sandoval County		State: New Mexico
Location: Village of Jemez Springs WWTP		
Subject: Aeration basin in settling phase		

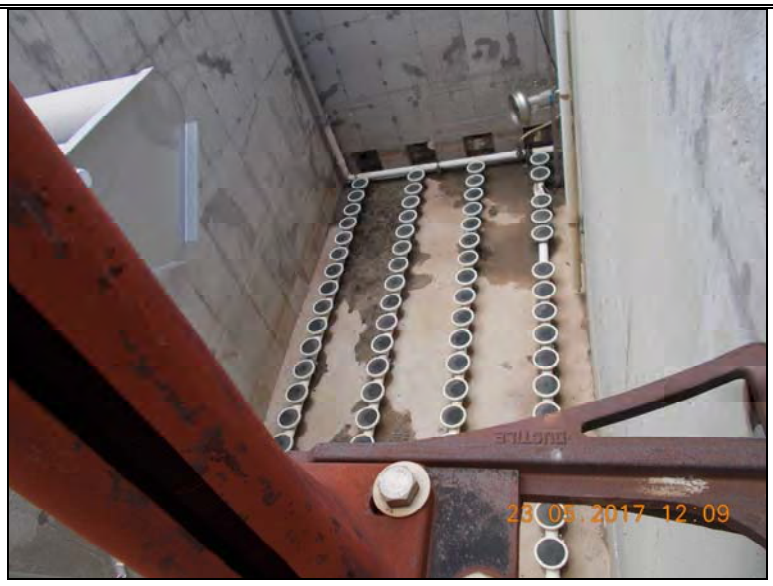


NMED/SWQB Official Photograph Log Photo # 14		
Photographer: B. Cooney	Date: May 23, 2017	Time:12:14 Hours
City/County: Village of Jemez Springs / Sandoval County		State: New Mexico
Location: Village of Jemez Springs WWTP		
Subject: Sludge aerobic digester, Waste solids are sent to the basin. A septage hauler removes solids from here.		

NMED/SWQB Official Photograph Log Photo # 15		
Photographer: B. Cooney	Date: May 23, 2017	Time:
City/County: Village of Jemez Springs / Sandoval County		State: New Mexico
Location: Village of Jemez Springs WWTP		
Subject: decant arm in basin some floating solids were observed.		

NMED/SWQB Official Photograph Log Photo # 16 & 17		
Photographer: B. Cooney	Date: May 23, 2017	Time: 12:12 & 12:07 Hours
City/County: Village of Jemez Springs / Sandoval County		State: New Mexico
Location: Village of Jemez Springs WWTP		
Subject: Off line basin		

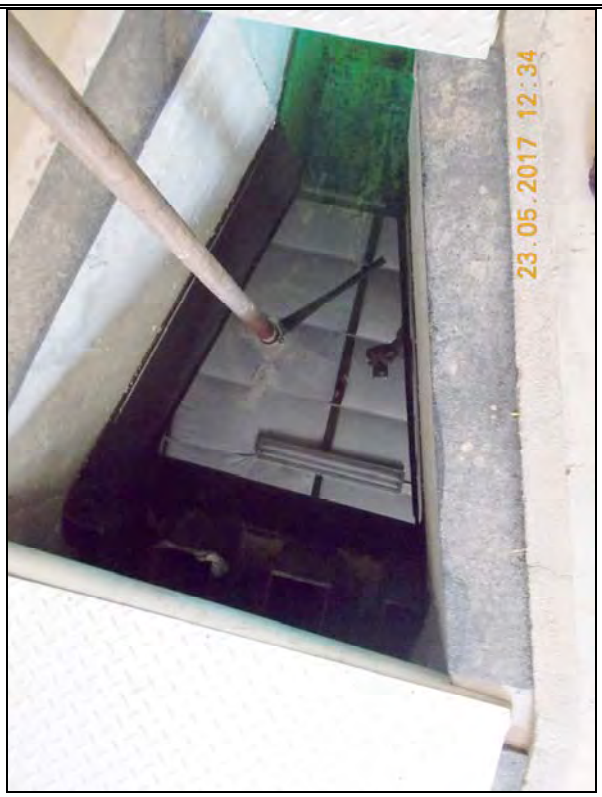
NMED/SWQB Official Photograph Log Photo # 18		
Photographer: B. Cooney	Date: May 23, 2017	Time: 12:09 Hours
City/County: Village of Jemez Springs / Sandoval County		State: New Mexico
Location: Village of Jemez Springs WWTP		
Subject: Off line basin air distribution line to the right has cracks and breaks that need to be replaced.		



NMED/SWQB Official Photograph Log Photo # 19		
Photographer: B. Cooney	Date: May 23, 2017	Time: 12:33 Hours
City/County: Village of Jemez Springs / Sandoval County		State: New Mexico
Location: Village of Jemez Springs WWTP		
Subject: UV disinfection channel – all lights were operable and clean at the time of the inspection.		

NMED/SWQB Official Photograph Log Photo # 20		
Photographer: B. Cooney	Date: May 23, 2017	Time: 12:34 Hours
City/County: Village of Jemez Springs / Sandoval County		State: New Mexico
Location: Village of Jemez Springs WWTP		
Subject: Extra lights being cleaned.		

NMED/SWQB Official Photograph Log Photo # 21		
Photographer: B. Cooney	Date: May 23, 2017	Time: 12:34 Hours
City/County: Village of Jemez Springs / Sandoval County		State: New Mexico
Location: Village of Jemez Springs WWTP		
Subject: UV basin some solids noted at bottom of basin.		



NMED/SWQB Official Photograph Log Photo # 22		
Photographer: B. Cooney	Date: May 23, 2017	Time: 12:40 Hours
City/County: Village of Jemez Springs / Sandoval County		State: New Mexico
Location: Village of Jemez Springs WWTP		
Subject: New Effluent Flow meter is a six inch Parshall Flume with staff gauge and an ultrasonic sensor.		

NMED/SWQB Official Photograph Log Photo # 23		
Photographer: B. Cooney	Date: May 23, 2017	Time: 14:37 Hours
City/County: Village of Jemez Springs / Sandoval County		State: New Mexico
Location: Village of Jemez Springs WWTP		
Subject: Jemez River above at the Village Office and approx. 2 miles above the WWTP.